

APPENDIX K.

DEMO PLANT DISMANTLEMENT AND
IMTT SITE RESTORATION ACTIVITIES

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Item #16 of ECH's Environmental Improvement Pilot Test permit (Permit Activity ID Number EIP070001) required that "After the EIPT has been completed, the permittee [ECH] shall dismantle and remove all equipment included in the Cement-Lock Demonstration-Scale Dredge Sediment Facility, and refrain from performing any site operations or activities without obtaining the necessary approvals from the Department." ECH's lease with IMTT also required that the site be restored to conditions similar to those extant when the lease was signed. To that end ECH began making arrangements and also sought interested parties to purchase the Cement-Lock demo plant for possible reassembly and re-commissioning at another location to continue development of the technology. However, because no suitable buyer was found, steps were initiated to demolish the plant and restore the site, which included removal of all unused raw materials, sediment, activated carbon materials, and debris.

As mentioned in a previous section, the final Cement-Lock demo plant test was conducted from May 14 – 19, 2007 with Passaic River sediment. Upon completion of the campaign, all of the rental equipment was disconnected, dismantled and returned including: conveyors, emergency generator and automatic transfer switch, scaffolding, skid steer loaders, ALLU screening bucket, trash dumpster, portable toilet, etc. The rental trailer was disconnected from power and returned to Williams Scotsman along with the storage box. Natural gas and electric services were terminated and disconnected.

The V-Ram feeder was sold back to V-Ram Solids. The air compressor was sold to Scales Compressor Company. Other materials, such as computers, monitors, manuals, drawings, tables, chairs, lockers, rototiller, etc. were returned to GTI for ultimate disposition.

On June 1, 2007 ECH received a bid from Metal Management Northeast (MTLM) for plant demolition and site restoration. In comparison with other bids that ECH received, the MTLM bid was favorable. Subsequently, ECH awarded the contract to MTLM on August 20, 2007.

Disposition of Process Materials

Prior to initiating demolition activities, MTLM stipulated that all process materials be removed from the demo plant site before any work was conducted. This was necessary to facilitate the demolition activities and to remove any potentially hazardous materials that the demolition crew may be exposed to. It was also in line with the overall project emphasis on safety by all parties. The process materials included: Stratus Petroleum sediment (105.4 tons), Passaic River sediment (146.2 tons), Ecomelt (16.9 tons), and various quantities of alumina, limestone, lime, fluorspar, and activated carbon (2 batches – one sulfur impregnated, the other neat carbon), bag house dust, and mixed debris. After securing the necessary analytical support information including Material Safety Data Sheets (MSDS), the limestone, alumina, and activated carbon samples were removed from the site by a local environmental services company, EQ Terminal Services. The materials removed from the demo plant site include the following with quantities and final destination.

Material	Quantity	Final Destination/ Disposal Site
Stratus Petroleum sediment	105.4 tons	ProLogis Elizabeth Seaport Business Park, Elizabeth, NJ
Ecomelt	16.9 tons	ProLogis Elizabeth Seaport Business Park, Elizabeth, NJ
Passaic River sediment	146.2 tons	Wayne Disposal, Inc., Site #2 Landfill, 49350 N. I-94 Service Drive, Belleville, MI 48211
Activated carbon pellets	34.1 tons	Envirite of Pennsylvania, 730 Vogelsong Road, York, PA 17404
Alumina	200-300 lb	Envirite of Pennsylvania, 730 Vogelsong Road, York, PA 17404
Limestone/lime mixture	18.9 tons	Clean Earth of North Jersey, 115 Jacobus Avenue, South Kearny, NJ 07032
Fluorspar	800 lb	EQ Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211
Ethylene glycol	4 55-gallon drums	EQ Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211
Bag house dust (spent lime), miscellaneous debris	13 55-gallon drums	EQ Detroit, Inc., 1923 Frederick Street, Detroit, MI 48211

Beneficial Use of Stratus Petroleum Sediment and Ecomelt

ECH prepared and submitted a formal request for an Acceptable Use Determination (AUD) from the NJ-DEP to beneficially dispose of the Stratus Petroleum sediment and Ecomelt. The NJ-DEP granted the AUD to ECH for these materials on September 19, 2007. A copy of the formal request for AUD, supporting documents, and the AUD issued by NJ-DEP are included in Appendix I. On September 25, 2007 these materials were loaded onto eight trucks provided by Clean Earth Dredging Technologies, Inc. and then delivered to the Prologis Elizabeth Seaport Business Park, Elizabeth, NJ and beneficially used as geotechnical fill.

Disposal of Passaic River Sediment

ECH's request for an AUD for beneficial use of the Passaic River sediment was denied by NJ-DEP on September 19, 2007. Several samples of the Passaic River sediment exceeded the dioxin TEQ limit for beneficial use of 1 ppb. Also, the average PCB content of the sediment samples was 3.4 ppm, which exceeded the PCB limit for beneficial use of 2 ppm. Therefore, the sediment needed to be disposed in a secure landfill. ECH worked with EQ again to dispose of the Passaic River sediment in an environmentally acceptable manner.

On October 9, 2007 seven trucks provided by EQ were loaded with 146.2 tons of Passaic River sediment. The sediment was delivered to a secure landfill at Wayne Disposal, Inc., Site #2 Landfill, 49350 N. I-94 Service Drive, Belleville, MI 48211 on October 10, 2007.

Plant Demolition and Site Restoration

The MTLM demolition crew attended IMTT Safety Orientation on September 19, 2007. The same day, MTLM, IMTT, RPMS, and GTI convened a safety review meeting to review IMTT safety rules and regulations. MTLM began plant demolition on September 26 (Wednesday). The work was completed on October 15 (Monday) in 14 days, 6 days fewer than MTLM originally planned. Photographs of the site after demolition and site restoration are shown below in Figures 1K through 4K. Notably, MTLM conducted the demolition safely without any injuries or lost time and closely followed IMTT rules and regulations.

After the plant demolition and site restoration activities were completed, IMTT authorized Bluestone Environmental Services L.L.C. to take 5 (plus 1 duplicate) surface soil samples for



Figure 1K. Cement-Lock Demo Plant Site Post Demolition
and Site Restoration (Looking northwest)



Figure 2K. Cement-Lock Demo Plant Site Post Demolition
and Site Restoration (Looking north northwest)



Figure 3K. Cement-Lock Demo Plant Site Post Demolition and Site Restoration (Looking north)



Figure 4F. Cement-Lock Demo Plant Site Post Demolition and Site Restoration (Looking northeast)

comparison with baseline samples taken in April 2002. The objective was to determine the impact, if any, of ECH's activities on the IMTT site. The results showed that ECH activities did not adversely impact the IMTT site.

All equipment, materials, wastes and debris associated with the Cement-Lock demonstration plant project have been removed from the site. ECH has officially withdrawn from the IMTT site.